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EXAMINER	
KALINOWSKI, ALEXANDER G	

ART UNIT	PAPER NUMBER
3626	

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/658,370	MCMULLEN ET AL.	
	Examiner	Art Unit	
	Alexander Kalinowski	3626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2003*.

2a)☒ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,11-18 and 20-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-9,11-18 and 20-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-9, 11-18 and 20-30 are presented for examination. Of claims 1-20 originally filed on 9/8/2000, Applicant filed an amendment on 6/26/2003 amending claims 1 and 11 and adding new claims 21-28. Applicant filed a request for continued examination on 11/25 2003. Applicant further filed an amendment on 11/25/2003, canceling claims 10 and 19 and amending claims 1, 8, 9, 11, 18, 20, and 22 and adding new claims 29 and 30. In light of new limitations added by Applicant's amendment to independent claims 1,11, and 18 that were not present in the previously pending claims, the Examiner withdraws the grounds of rejection of claims 1-28 based on 35 USC 103. New grounds of rejection are established in the instant office action as set forth in detail below.

Response to Arguments

2. Applicant's arguments with respect to claims 1-9, 11-18, and 20-30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-9, and 21-27 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

(1) whether the invention is within the technological arts; and

(2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, the instant claims fail to recite the use of any type of technology (e.g. computer system) within the recited steps of the claimed method of managing a transportation system. The recited steps constitute an idea on how to create and manage a transportation system.

Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case the claimed method recites steps for managing a transportation system.

Although the claimed invention produces a useful, concrete and tangible result, since the claimed invention as a whole is not within the technological arts,

as explained above, claims 1-9 and 21-27 are deemed to be directed to non statutory subject matter. The Examiner suggests incorporating recitations within the limitations of the independent claim that indicate the claimed steps are being carried out by the use of technological arts (i.e. computer).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-9, 11-18, 20-21, 23, 25, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nickles et al., Pat. No. 6,144,901 (hereinafter Nickles) in view of Gibbs, Pat. No. 5,836,529 and Pierro et al., Pat. No. 6,301,531 (hereinafter Pierro).

As to claims 1, 18, 20, 29, Nickles discloses a method for managing a transportation system (see abstract), said method comprising the steps of: collecting at least one set of transportation data from at least one subsystem (i.e. monitors parameters ... based on the current energy state of the train)(col. 4, line 53 - col. 5, line 5);

comparing the at least one set of collected transportation data set to at least one standard transportation data (i.e. programming limits into the system such that when the limits are exceeded ...)(col. 5, lines 33-40); and

generating at least one problem area data set based upon the comparison of the collected and standard data (col. 10, lines 37-58 and col. 11, lines 12-21).

Nickles does not explicitly disclose

recommending business activities relating to managing the transportation business entity based on at least one of the generated problem are data set and the comparison of the collected and standard data.

However, Gibbs discloses recommending business activities relating to managing the transportation business entity based on at least one of the generated problem are data set and the comparison of the collected and standard data (i.e. ... if the data item deviate from the user specified value or a range of nominal or expected values , an alert signal is generated ... warns the user of the variance ...)(col. 4, lines 1-24 and col. 12, lines 33-48). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include recommending business activities relating to managing the transportation business entity based on at least one of the generated problem are data set and the comparison of the collected and standard data as disclosed by Gibbs within Nickles for the motivation of providing railroad personnel with a set of tools for maximizing resource allocation, minimizing exceptions and improving on-time delivery to their customers (col. 4, lines 11-24).

Nickles and Gibbs do not explicitly disclose

wherein recommending business activities relating to managing the transportation business entity includes at least one of altering an asset allocation priority, generating a maintenance action, altering a state of a transportation system environmental system, determining at least one location of emergency equipment, recommending at least one location for a repair facility, determining an emergency equipment inventory, and determining an inventory for each repair facility.

However, Pierro discloses wherein recommending business activities relating to managing the transportation business entity includes at least one of altering an asset allocation priority, generating a maintenance action, altering a state of a transportation system environmental system, determining at least one location of emergency equipment, recommending at least one location for a repair facility, determining an emergency equipment inventory, and determining an inventory for each repair facility (col. 3, lines 47-57 and col. 5, lines 1-53). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include wherein recommending business activities relating to managing the transportation business entity includes at least one of altering an asset allocation priority, generating a maintenance action, altering a state of a transportation system environmental system, determining at least one location of emergency equipment, recommending at least one location for a repair facility, determining an emergency equipment inventory, and determining an inventory for each repair facility as disclosed by Pierro within Nickles and

Gibbs for the motivation of predicting faults in vehicle operation and dealing with predicted faults before they occur (col. 1, lines 63-67).

As to claim 2, Nickles discloses a method in accordance with Claim 1 wherein the at least one sub-system includes at least one of a wayside sub-system, a locomotive sub-system, a railcar sub-system, a yard sub-system, a schedule sub-system, a monitoring and diagnostic sub-system and a management making sub-system (Fig. 2, Fig. 5 and col. 4, line 53 - col. 5, line 5).

As to claim 3, Nickles discloses a method in accordance with Claim 1 wherein collecting at least one set of transportation data from at least one sub-system comprises the step of collecting real-time data from at least one sub-system (col. 4, line 53 - col. 5, line 5).

As to claim 4, Nickles discloses a method in accordance with Claim 3 wherein the transportation system includes at least one vehicle, said method further comprising the step of altering a performance of the vehicle based upon the problem area data set (col. 10, lines 37-58 and col. 11, lines 12-21).

As to claim 5, Nickles discloses a method in accordance with Claim 4 wherein said step of altering the performance of the vehicle based upon the problem area data set comprises the step of continuously altering the performance of the vehicle based upon the real-time data (col. 4, lines 53-62 and col. 7, line 59 - col. 8, line 21).

As to claim 6, Nickel discloses a method in accordance with Claim 1 further comprising the step of identifying at least one source of delay (col. 4, lines 53-62 and col. 14, lines 31-49).

As to claim 7, Nickles discloses a method in accordance with Claim 6 wherein said step of identifying at least one source of delay comprises the step of identifying a defined quantity of largest source of delays (col. 12, line 25 - col. 13, line 54).

As to claim 8, Nickles discloses a method in accordance with Claim 7 wherein said step of identifying a defined quantity of largest source of delays comprises the step of a user selecting a number of largest source of delays(col. 12, line 25 - col. 13, line 54).

As to claim 9, Nickles discloses a method in accordance with Claim 1 further comprising the steps of determining a predicted transportation system delay based upon the problem area data (col. 8, lines 22-31 and col. 11, lines 12-21).

As to claim 10, Nickles discloses a method in accordance with Claim 1 wherein said step of collecting at least one set of transportation data from at least one sub-system comprises the step of transmitting data between at least one sub-system and a data center utilizing at least one communication link (col. 8, lines 13-21).

As to claim 11, Nickles discloses a management system for managing a transportation system comprising:

at least one sub-system for collecting at least one set of transportation data (i.e. monitors parameters ... based on the current energy state of the train)(col. 4, line 53 - col. 5, line 5);

a sub-system for comparing the at least one set of collected transportation data set to at least one standard transportation data (i.e. programming limits into the system such that when the limits are exceeded ...)(col. 5, lines 33-40); and

a sub-system for generating at least one problem area data set based upon the comparison of the collected and standard data (col. 10, lines 37-58 and col. 11, lines 12-21).

Nickles does not explicitly disclose

a management and decision making sub-system that is configured to recommend business activities relating to managing the transportation business entity based on at least one of the generated problem data set and the comparison of the collected and standard data.

However, Gibbs discloses a management and decision making sub-system that is configured to recommend business activities relating to managing the transportation business entity based on at least one of the generated problem data set and the comparison of the collected and standard data (i.e. ... if the data item deviate from the user specified value or a range of nominal or expected values , an alert signal is generated ... warns the user of the variance ...)(col. 4, lines 1-24 and col. 12, lines 33-48). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include a management and decision making sub-system that is configured to recommend business activities relating to managing the transportation business entity based on at least one of the generated problem data set and the comparison of the collected and standard data as disclosed by Gibbs within Nickles for the

motivation of providing railroad personnel with a set of tools for maximizing resource allocation, minimizing exceptions and improving on-time delivery to their customers (col. 4, lines 11-24).

Nickles and Gibbs do not explicitly disclose a subsystem for analyzing the at least one set of collected transportation data set for at least one of failure modes and effects, anticipated failure probabilities and failure corrective actions.

However, Pierro discloses a subsystem for analyzing the at least one set of collected transportation data set for at least one of failure modes and effects, anticipated failure probabilities and failure corrective actions (col. 3, lines 47-57 and col. 5, lines 1-53). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include a subsystem for analyzing the at least one set of collected transportation data set for at least one of failure modes and effects, anticipated failure probabilities and failure corrective actions as disclosed by Pierro within Nickles and Gibbs for the motivation of predicting faults in vehicle operation and dealing with predicted faults before they occur (col. 1, lines 63-67).

As to claim 12, Nickles discloses a management system in accordance with Claim 11 wherein said at least one sub-system includes at least one of a wayside sub-system, a locomotive sub-system, a railcar sub-system, a yard sub-system, a schedule sub system, a monitoring and diagnostic sub-system and a management or decision making sub-system (Fig. 2, Fig. 5 and col. 4, line 53 - col. 5, line 5).

As to claim 13, Nickles discloses a management system in accordance with Claim 11 wherein said at least one sub-system for collecting at least one set of transportation data is configured to collect real-time data from said at least one sub-system (col. 4, line 53 - col. 5, line 5).

As to claim 14, Nickles discloses a management system in accordance with Claim 13, wherein the transportation system includes at least one vehicle, said management system configured to alter a performance of at least one vehicle based upon the problem area data set (col. 10, lines 37-58 and col. 11, lines 12-21)

As to claim 15, Nickles discloses a management system in -accordance with Claim 14 wherein at least one sub-system is configured of continuously altering the performance of the vehicle based upon the real-time data (col. 4, lines 53-62 and col. 7, line 59 - col. 8, line 21).

As to claim 16, Nickles discloses a management system in accordance with Claim 11 wherein said at least one sub-system is configured to identify at least one source of delay (col. 4, lines 53-62 and col. 14, lines 31-49).

As to claim 17, Nickles discloses a management system in accordance with Claim 16 wherein said at least one sub-system is further configured to identify a pre-defined quantity of largest source of delays (col. 12, line 25 - col. 13, line 54).

As to claim 21, Nickles does not explicitly disclose a method in accordance with Claim 1 wherein generating at least one problem are data set based upon the occurrence comparison of the collected and standard data

comprises identifying delays for each of at least one of a selected type of delay or failure.

However, Gibbs discloses wherein generating at least one problem are data set based upon the occurrence comparison of the collected and standard data comprises identifying delays for each of at least one of a selected type of delay or failure (i.e. no power available, ...)(see Fig. 8d). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include wherein generating at least one problem are data set based upon the occurrence comparison of the collected and standard data comprises identifying delays for each of at least one of a selected type of delay or failure as disclosed by Gibbs within Nickles for the motivation of providing railroad personnel with a set of tools for maximizing resource allocation, minimizing exceptions and improving on-time delivery to their customers (col. 4, lines 11-24).

As to claim 23, Nickles does not explicitly disclose a method in accordance with claim 21 wherein recommending business activities comprises sorting the identified delays based upon a magnitude of delays.

However, Gibbs discloses wherein recommending business activities comprises sorting the identified delays based upon a magnitude of delays (see Fig. 8e). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include wherein recommending business activities comprises sorting the identified delays based upon a magnitude of delays as disclosed by Gibbs within Nickles for the motivation of providing railroad

personnel with a set of tools for maximizing resource allocation, minimizing exceptions and improving on-time delivery to their customers (col. 4, lines 11-24).

As to claim 25, Nickles does not explicitly disclose a method in accordance with claim 1 wherein generating at least one problem area data set based upon the comparison of the collected and standard data recommending comprises determining shipment damage locations.

However, Gibbs discloses generating at least one problem area data set based upon the comparison of the collected and standard data recommending comprises determining shipment damage locations (i.e. warning criteria)(Fig. 8a, 8b, 8d and 9b). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include generating at least one problem area data set based upon the comparison of the collected and standard data recommending comprises determining shipment damage locations as disclosed by Gibbs within Nickles for the motivation of providing railroad personnel with a set of tools for maximizing resource allocation, minimizing exceptions and improving on-time delivery to their customers (col. 4, lines 11-24).

As to claim 27, Nickles does not explicitly disclose a method in accordance with claim 1 wherein recommending business activities relating to managing the transportation business entity comprises providing real time transportation entity management with real time transportation system wide problem area data sets.

However, Gibbs discloses wherein recommending business activities relating to managing the transportation business entity comprises providing real

time transportation entity management with real time transportation system wide problem area data sets (see Fig. 8d and 8e). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include wherein recommending business activities relating to managing the transportation business entity comprises providing real time transportation entity management with real time transportation system wide problem area data sets as disclosed by Gibbs within Nickles for the motivation of providing railroad personnel with a set of tools for maximizing resource allocation, minimizing exceptions and improving on-time delivery to their customers (col. 4, lines 11-24).

As to claim 28, Nickles does not explicitly disclose a system in accordance with claim 11 comprising a management and decision making sub-system configured to provide transportation entity management with real time transportation system wide problem area data sets.

However, Gibbs discloses a management and decision making sub-system configured to provide transportation entity management with real time transportation system wide problem area data sets(see Fig. 8d and 8e). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include a management and decision making sub-system configured to provide transportation entity management with real time transportation system wide problem area data sets as disclosed by Gibbs within Nickles for the motivation of providing railroad personnel with a set of tools for maximizing resource allocation, minimizing exceptions and improving on-time delivery to their customers (col. 4, lines 11-24).

6. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nickles, Gibbs, and Pierro as applied to claim 1 above, and further in view of Goode, David R., "Pruning and improving the equipment fleet" (hereinafter Goode).

As to claim 24, Nickles, Gibbs, and Pierro do not explicitly disclose a method in accordance with Claim 1 wherein recommending business activities relating to managing transportation business activity comprises at least one of predicting a life of a railcar and predicting a maintenance cost of the railcar over the life of the railcar.

However, Goode discloses recommending business activities relating to managing transportation business activity comprises at least one of predicting a life of a railcar and predicting a maintenance cost of the railcar over the life of the railcar (i.e. removing cars that are unfit to load ... removing cars with high maintenance history ...)(page 2). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include recommending business activities relating to managing transportation business activity comprises at least one of predicting a life of a railcar and predicting a maintenance cost of the railcar over the life of the railcar as disclosed by Goode within Nickles, Gibbs, and Pierro for the motivation of better meeting customer loading demand and improve return on invested capital while freeing the railroad to give better service (page 2, second full paragraph).

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nickles, Gibbs, and Pierro as applied to claim 1 above, and further in view of "The proof is in the payout"(hereinafter Payout).

As to claim 26, Nickles, Gibbs, and Pierro do not explicitly disclose a method in accordance with Claim 1 wherein recommending business activities relating to managing the transportation entity comprises determining at least one of an insurance claim type, a quantity of insurance claims, and a risk profile of at least one of a transportation carrier, railcar car and a route.

However, Payout discloses recommending business activities relating to managing the transportation entity comprises determining at least one of an insurance claim type, a quantity of insurance claims, and a risk profile of at least one of a transportation carrier, railcar car and a route (i.e. loss and damage claims ... damage prevention ...)(see abstract and pages 1-2) It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include recommending business activities relating to managing the transportation entity comprises determining at least one of an insurance claim type, a quantity of insurance claims, and a risk profile of at least one of a transportation carrier, railcar car and a route as disclosed by Payout within Nickles, Gibbs, and Pierro for the motivation of encouraging damage prevention techniques (page 2, column 1 and page 3, column 3).

8. Claims 22 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nickles, Gibbs, and Pierro as applied to claims 21 and 11 above, and further in view of Bryan, Pat. No. 5,867,404.

As to claim 22, Nickles, Gibbs and Pierro do not explicitly disclose a method in accordance with Claim 21 wherein said selected type of delay comprises at least one of maintenance delays and broken track delays.

However, Bryan discloses wherein said selected type of delay comprises at least one of maintenance delays and broken track delays (see Fig. 5, Fig. 8 and col. 9, lines 27-46).) It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include wherein said selected type of delay comprises at least one of maintenance delays and broken track delays as disclosed by Bryan within Nickles, Gibb and Pierro for the motivation of utilizing sensing and tracking systems to overcome defects in railway systems saving costs related to damage and human lives (col. 3, lines 4-23).

As to claim 30, Nickles, Gibbs and Pierro do not explicitly disclose a management system in accordance with claim 11 wherein said management and decision making subsystem is further configured to alter the status of a non-locomotive component to in to the generated problem area data set, wherein said non-locomotive component includes at least one of a repair vehicle, a maintenance work order, and a track capacity.

However, Bryan discloses wherein said management and decision making subsystem is further configured to alter the status of a non-locomotive component to in to the generated problem area data set, wherein said non-locomotive component includes at least one of a repair vehicle, a maintenance work order, and a track capacity (unit 870, Fig. 7).) It would have been obvious

to one of ordinary skill in the art at the time of Applicant's invention to include wherein said management and decision making subsystem is further configured to alter the status of a non-locomotive component to in to the generated problem area data set, wherein said non-locomotive component includes at least one of a repair vehicle, a maintenance work order, and a track capacity as disclosed by Bryan within Nickles, Gibb and Pierro for the motivation of utilizing sensing and tracking systems to overcome defects in railway systems saving costs related to damage and human lives (col. 3, lines 4-23).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Pat. No. 5,978,717 discloses a system for railway maintenance.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Kalinowski, whose telephone number is (703) 305-2398. The examiner can normally be reached on Monday to Thursday from 9:00 AM to 6:30 PM. In addition, the examiner can be reached on alternate Fridays.

If any attempt to reached the examiner by telephone is unsuccessful, the examiner's supervisor, Joseph Thomas, can be reached on (703) 305-9588. The fax telephone number for this group is (703) 305-7687 (for official communications including After Final communications labeled "Box AF").

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7th Floor, receptionist.

Alexander Kalinowski

Primary Examiner

Art Unit 3626

12/12/03